

# Five Tips for the High School Wrestler

by Joe Giandonato, MBA, MS, CSCS

The foundation for a successful and long athletic career is comprised of sensible training and dietary approaches in conjunction with proper recovery.

Having spent the past decade as a strength and conditioning coach working with athletes hailing from nearly every imaginable sport, I can attest that wrestlers, as a whole, are the hardest working athletes I've trained. During punishing workouts, I've witnessed many wrestlers defy the laws of physiology and scrape together every fiber of their intestinal fortitude to survive.

While success in competitive is predicated on laborious preparation, some wrestlers, especially those competing at the youth and high school levels, take it too far. Engaging in drastic measures often yields undesirable results and in some cases, sets the stage for burnout. In order to ensure success and longevity, the tips set forth in this article should be ascribed to.

## 1. Manage Weight Safely

Cutting weight is ingrained in the culture of the sport. Weight cuts ensure eligibility and offer some wrestlers a competitive advantage. However, cutting weight, which is characterized by rapid weight loss, is a maligned and risky approach. Methods such as stewing in a sauna, layering clothing during a training session, and exercising in a bathroom with a hot shower running have at one point been utilized by wrestlers to make their desired weight. Most of the weight loss stemming from these measures consists of fluid loss, which causes electrolyte imbalances, reduces performance, and makes the athlete more susceptible to heat illness or injury.

Rather than resorting to extreme measures before a weigh-in, wrestlers should be advised to keep their weight as close to their competition weight as they can. In order to minimize fluctuations in body weight, sodium consumption should be reduced. Sodium is an electrolyte with hydrophilic properties, meaning that it has an affinity for water, causing excess fluid retention. It is recommended that sodium intake equal to or be less than 2,000 mg per day. Wrestlers training in hotter and more humid environments will require more sodium each day, to account for elevated sodium losses in sweat during exercise.

Weight loss should be gradual. Wrestlers should lose no more than 10% of initial body weight over a six month period, which amounts to 1 to 2 pounds of weight loss per week. Doing so will maintain normal metabolic functioning and will not adversely affect athletic performance. Incremental adjustments in dietary intake are suggested to normalize hormone production. Caloric intake and expenditure should be closely monitored and slightly modified depending on one's goals, needs, competitive demands, and performance.

## 2. Refuel and Rehydrate Properly

Post training refueling strategies should account for the intensity and duration at which an activity is performed. A mixed meal following training will best facilitate recovery. Post training meals should consist of the following:

- Carbohydrates to replete muscle glycogen stores and raise your blood sugar back to normal.
- Protein to repair damaged contractile proteins within muscle cells which are caused by exercise. Combining protein with carbohydrates elevates protein synthesis and reduces protein breakdown.
- Fats to satiate appetite and aid with the uptake of fat soluble vitamins found in many carbohydrate and protein sources.

In order to ensure adequate hydration, bodyweight should be collected prior to and following each training session. Twenty fluid ounces should be consumed for every pound lost during training. Further activity should be abstained from until lost fluids are replenished.

### 3. Don't Neglect Your Neck

Neck training is often eschewed by many athletes, but a wrestler's livelihood depends on it. The neck consists of a bundle of muscles which protect the cervical spine and maintain positioning of the head carriage and jaw. Stronger necks reduce concussive forces imposed on the brain during impact and help with respiratory and digestive functions. A stronger neck will also help you maintain spinal neutrality during compound lifts and Olympic lifts, keeping each segment of the spine in a safer position.

Each training session should commence with neck training starting with full-range-of-motion exercises and progressing into incorporating manually resisted isometrics. The isometrics are performed for time, which should gradually increase as your muscular strength improves. These exercises are a good starting point before progressing into loaded neck exercises and neck bridging variations.

Here's a simple but effective neck-training workout that requires nothing more than a physioball, a wall, and the floor. Start with two sets of each exercise.

#### Floor Chin Tuck

*Muscles Targeted: Deep Cervical Flexors*

Assume a supine position on the floor, with the back of the head, shoulders, lower back, and hips making contact with the ground. Elevate the legs off the ground and flex the hips. Simultaneously doing both will apply a compressive force to the lumbar spine, helping you lock the lower back in place on the floor. Inhale and drive the chin back into the throat and make a double chin, holding for two to three seconds as you exhale. Repeat five times.

#### Lateral Neck Flexion Isometric

*Muscles Targeted: Lateral Neck Flexors and Levator Scapulae*

Assume an all-fours position on the floor with a physioball between the side of your head and a wall. Drive your head into the ball, keeping your chin tucked and eyes fixed on the floor. Hold for 10 to 20 seconds. Perform a set on opposite side.

#### Cervical Neck Flexion Isometric

*Muscles Targeted: SCM and Hyoids*

Assume a kneeling position on the floor with a physioball between your forehead and a wall. Drive your forehead into the ball, attempting to tuck your chin to your chest. Hold for 10-20 seconds.

Neck Extension Isometric

*Muscles Targeted: Splenius, Longissimus and Semispinalis*

Stand facing away from a wall and with a physioball between the back of your head and the wall. Drive the crown of your head into the ball, attempting to look up through your brow line. Hold for 10-20 seconds.

4. Improve Thoracic Mobility and Scapular Stability

Collectively addressing T spine mobility and strengthening the muscles which control the scapulae will improve your posture, respiration, strength, and performance. The thoracic spine consists of twelve vertebrae which are bony bodies stacked on top of one another that protect the spinal cord and support the body. The thoracic spine rotates in upwards of 70 degrees, if not limited by adaptive restrictions caused by tight muscles. Over time, these muscles become stretched and weak causing the thoracic spine to flex forward, giving rise to shoulder mobility issues and forward head posture. In order to unlock thoracic mobility, adhesions within the tightened muscles need to be broken up. Typically thoracic extension is addressed first, followed by drills to improve thoracic rotation

Thoracic Extension Over Foam Roller

- Lie supine on floor with chin tucked and hips flexed
- Wedge foam roller beneath shoulder blades
- Cross your arms, trying to hug yourself
- Try to get your elbows, which should be stacked atop one another as close to your elbows as possible
- Inhale deeply
- Exhale as you slowly extend over the foam roller
- Drive the elbows up and the chin back as you extend over the foam roller
- Perform 5-10 reps in a controlled manner

Quadruped Thoracic Rotation

- Assume an all fours position
- Place one hand behind the head
- Inhale as you turn the head toward the down arm, driving the elbow of the arm down in the direction of the head
- Next, exhale slowly as drive the elbow up, turn the head, and open up the chest by turning through the shoulders
- Keep the core braced and spine long throughout the movement. Knees should be stacked below the hips and the wrist and elbow should fall directly below the shoulder.

- Perform 5-10 reps in a controlled manner

Each scapula or shoulder blade is stabilized by 17 muscles. The collection of muscles which share attachment points along the scapulae allow the scapulae to upwardly rotate, downwardly rotate, elevate, depress, retract, and protract. Sometimes these smaller, yet highly important muscles are overpowered by their larger counterparts, namely the pecs and lats, during movements such as the bench press and pull ups, feeding a muscular imbalances and movement dysfunction. However, you can activate, or “turn-on” these overshadowed muscles, so they can serve their intended purpose of stabilizing the scapulae.

### Scapular Wall Slide

#### *Muscles Targeted: Lower Traps*

- Position your back against the wall
- Extend arms to your sides and in line with shoulders
- Bend elbows to achieve 90-degree angle and press back of hands against wall
- Try to put your elbows in your “back pocket” as if your performing a pull ups, holding for two to three seconds at the bottom
- Straighten elbows to return to starting position
- Repeat for 10-15 reps

### Banded Pull Apart

#### *Muscles Targeted: Middle Traps, Rhomboids*

- Grasp a band at shoulder width
- Perform these standing, making sure to keep neck neutral, spine long, core braced with hips extended
- Initiate movement by squeezing shoulder blades together and finishing by driving arms out, pulling band horizontally across the body
- Holding for two to three seconds at the top
- Straighten elbows to return to starting position
- Repeat for 10-15 reps

### Cobra Push Up

#### *Muscles Targeted: Serratus Anterior*

- Assume a plank position and drop the hips on the floor.
- Keep the forearms in contact with the ground, and press the torso up and away from the hands.
- Try extending the thoracic spine as much as you can while maintaining a tucked chin.
- Hold for two to three seconds at the top
- Repeat for 5-10 reps

### 5. Don't Specialize Too Early

While this suggestion may ruffle the feathers of some wrestling coaches, younger athletes should avoid falling in the trap of early specialization. Early specialization, especially during preadolescence, feeds overuse injuries and may lead to burnout. Further, specializing too early may constrain the acquisition and development of motor skills, thus inhibiting athletic ability. Wrestlers, especially younger wrestlers should be advised to participate in other sports, either competitively or recreationally. Unstructured play and physical activities they deem fun should be encouraged to develop athleticism, improve aerobic fitness, and if performed with others, camaraderie. It is advisable that athletes do not specialize until it becomes readily apparent that they encompass the ability to perform at a higher level, such as a high school upperclassman that is being actively recruited by colleges. Ultimately, the decision to specialize boils down to the athlete's love of the sport. In addition to causing burnout, specialization may prompt an identity crisis once the athlete's career has concluded.

**Joe Giandonato, MBA, MS, CSCS, PES, USAW**, presently serves as the Coordinator of Fitness Programs at Drexel University, where he oversees assessments, personal training, and all recreational fitness programming. Previously, Giandonato served as the Head Strength and Conditioning Coach and Fitness Director at Germantown Academy in Fort Washington, PA, where he presided over the assessment, preparation, and implementation of training programs for athletes in grades 6 through 12 and a diverse and accomplished alumni base, many of whom compete in collegiate athletics and in a host of professional and amateur leagues. Giandonato also serves as an adjunct instructor of exercise science and fitness electives at colleges throughout the Philadelphia-area. Concurrent with his administrative and teaching duties, Giandonato is also an accomplished writer, having authored over 250 articles appearing on websites and in print. Presently, he serves as the Senior Science Editor for [joshstrength.com](http://joshstrength.com), a website dedicated to the pursuit of strength, athleticism, and muscle mass. Previously, Giandonato held stints at Saint Joseph's University, where he assisted with their strength and conditioning program, the University of Pennsylvania, where he served as a personal trainer within their Department of Recreation and at the Children's Hospital of Philadelphia, where he developed and availed health promotion programming in a number of departments. Giandonato is a 2007 graduate of Fairleigh Dickinson University, where he studied psychology, and holds masters degrees in exercise science and business administration. He is a Certified Strength and Conditioning Specialist through the National Strength and Conditioning Association, and is a professional member of the American Physiological Society, American College of Sports Medicine, and the National Academy of Sports Medicine.